

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for generating an extended-format Vendor Specific Attribute (VSA) packet comprising:

a RADIUS-compliant server for generating a VSA packet including a Vendor-Type field; and

wherein said VSA packet includes a Vendor-Extended-Type field if said Vendor-Type field contains a predetermined value wherein said Vendor extended type field is a designated portion of said packet ~~of a predetermined length of bits~~ for identifying a Vendor-Type wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits.

Claims 2-4 (Cancelled)

5. (Currently Amended) A method for generating an extended Vendor Specific Attribute (VSA) comprising:

determining whether an extended format VSA is desired;

if an extended format VSA is desired, then generating an extended format VSA containing a Vendor-Type field having a predetermined value indicating said VSA includes a Vendor-Extended-Type field ~~else~~ in said VSA and a Vendor-Extended-Type field wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits.

Claims 6-8 (Cancelled)

9. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for generating an extended Vendor Specific Attribute (VSA) comprising:

determining whether an extended format VSA is desired;

if an extended format VSA is desired, then generating an extended format VSA containing at least a Vendor-Type field having a predetermined value indicating said VSA includes a Vendor-Extended-Type field elsewhere in said VSA and said Vendor-Extended-Type field wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits.

Claims 10-15 (Cancelled)

16. (Currently Amended) A method for receiving an extended Vendor Specific Attribute (VSA) comprising:

reading a Vendor Type field from said VSA;

determining whether said VSA Type field includes a predetermined value;

determining a received packet contains an extended format VSA responsive to a determination that said VSA type field includes said predetermined value;

if said received packet contains an extended format VSA, then reading an extended value contained in a Vendor-Extended-Type field wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8

bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits; and

if said received packet does not contain an extended format VSA, then processing said received packet as normal.

Claims 17-20 (Cancelled)

21. (Currently Amended) An apparatus for receiving an extended Vendor Specific Attribute (VSA) comprising:

means for reading a Vendor Type field from said VSA;

means for determining whether said VSA Type field includes a predetermined value;

means for determining a received packet contains an extended format VSA responsive to a determination that said VSA type field includes said predetermined value;

means for reading an extended value contained in a Vendor-Extended-Type field if said received packet contains an extended format VSA wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits; and

means for processing said received packet as normal if said received packet does not contain an extended format VSA.

Claims 22-30 (Cancelled)

31. (Currently Amended) An apparatus for receiving an extended Vendor Specific Attribute (VSA) by a machine comprising:

means for determining whether the machine is capable of receiving a VSA packet containing an extended format VSA;

means for reading an extended value contained in a Vendor-Extended-Type field if said machine is capable of receiving a VSA packet containing an extended format VSA wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits; and

means for processing said received packet as normal if said machine is not capable of receiving a packet containing an extended format VSA.

Claims 32-35 (Cancelled)

36. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for receiving an extended Vendor Specific Attribute (VSA) comprising:

reading a Vendor Type field from said VSA;

determining whether said VSA Type field includes a predetermined value;

determining a received packet contains an extended format VSA responsive to a determination that said VSA type field includes said predetermined value wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits;

if said received packet contains an extended format VSA, then reading an extended value contained in a Vendor-Extended-Type field; and

if said received packet does not contain an extended format VSA, then processing said received packet as normal.

Claims 37-40 (Cancelled)

41. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for receiving an extended Vendor Specific Attribute (VSA) by a machine comprising:

determining whether the machine is capable of receiving a packet containing an extended format VSA by examining said received packet to determine whether a Vendor-Type field contains a predetermined value;

if said machine is capable of receiving a packet containing an extended format VSA, then reading an extended value contained in a Vendor-Extended-Type field wherein said VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits; and

if said machine is not capable of receiving a packet containing an extended format VSA, then processing said received packet as normal.

Claims 42-45 (Cancelled)

46. (Currently Amended) An apparatus for generating an extended Vendor Specific Attribute (VSA) comprising:

means for determining whether an extended format VSA is desired;

means for generating an extended format VSA packet containing at least a Vendor-Type field having a predetermined value and a Vendor-Extended-Type field if an extended format VSA is desired wherein said extended format VSA packet has a field sequence of a Type field having 8 bits followed by a Length field having 8 bits followed by a Vendor-identification field having 32 bits followed by a Vendor-Type field having 8 bits followed by an Internal Length field having 8 bits which is followed by said Vendor-Extended-Type field having 32 bits.

Claims 47-49 (Cancelled)